

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
P-3639P1/BDIS-3CIPSERIAL NO.
08/803,702INFORMATION DISCLOSURE
STATEMENT BY APPLICANTAPPLICANT
Maino et al.FILING DATE
February 21, 1997

GROUP 1644

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>HP</i>	5,843,689	12/1998	Anderson	435	7.24	
<i>HP</i>	5,656,446	08/1997	Anderson	435	7.24	
<i>HP</i>	5,445,939	08/1995	Anderson	435	7.24	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	

EXAMINER *Fuehl*

DATE CONSIDERED 1/22/01

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>ASZ</i>	5,635,363	06/1997	Altman et al.	—	—	

FOREIGN PATENT DOCUMENTS

TRANSLATION

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>ASZ</i>	Andersson <i>et al.</i> , "Concomitant <i>in vivo</i> production of 19 different cytokines in human tonsils," <i>Immunology</i> 83:16 - 24 (1994)
<i>1</i>	Cotner <i>et al.</i> , "Simultaneous flow cytometric analysis of human T cell activation antigen antigen expression and DNA content," <i>J. Exp. Med.</i> 157:461 - 472 (1983)
<i>1</i>	Elson <i>et al.</i> , "Flow cytometric analysis for cytokine production identifies T Helper1, T Helper 2, and T Helper 0 cells within the human CD4 ⁺ CD27 ⁻ lymphocyte subpopulation," <i>J. of Immunology</i> , pp. 4294 - 4300 (1995)
<i>ASZ</i>	McHeyzer-Williams <i>et al.</i> , "Antigen-specific development of primary and memory T cells in vivo," <i>Science</i> 268:106 - 11 (April 1995)

EXAMINER *Ewald*DATE CONSIDERED *1/22/01*

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
MB	5,407,805	04/1995	Seon	435	7.23	
MB	5,093,234	03/1992	Schwartz	435	7.21	

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						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
MB	Becton Dickinson Immunocytometry Systems, "Detection of Intracellular Cytokines in Activated Lymphocytes," <u>Application Note 1</u> , 1-12 (1997).
	Brett, S.J. et al., "Limiting Dilution Analysis of the Human T Cell Response to Mycobacterial Antigens from BCG Vaccinated Individuals and Leprosy Patients," <u>Clin. Exp. Immunol.</u> , 68:510-520 (1987).
	Bucy, R.P. et al., "Heterogeneity of Single Cell Cytokine Gene Expression in Clonal T Cell Populations," <u>J. Exp. Med.</u> , 180:1251-1262 (1994).
	Clouse, K.A. et al., "Enumeration of Viral Antigen-Reactive Helper T Lymphocytes in Human Peripheral Blood by Limiting Dilution for Analysis of Viral Antigen-Reactive T-Cell Pools in Virus-Seropositive and Virus-Seronegative Individuals," <u>J. Clin. Microbiol.</u> , 27(10):2316-2323 (1989).
MB	Davis, M.M. et al., "Ligand Recognition by $\alpha\beta$ T Cell Receptors," <u>Annu. Rev. Immunol.</u> , 16:523-544 (1998).

EXAMINER Ruth Gamber

3/26/00

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EXAMINER INITIAL	
<i>m</i>	Del Prete, G.F. et al., "Purified Protein Derivative of <i>Mycobacterium tuberculosis</i> and Excretory-Secretory Antigen(s) of <i>Toxocara canis</i> Expand In Vitro Human T Cells with Stable and Opposite (Type 1 T Helper or Type 2 T Helper) Profile of Cytokine Production," <u>J. Clin. Invest.</u> , 88:346-350 (1991).
	Dobrescu, D. et al., "Enhanced HIV-1 Replication in V β 12 T Cells Due to Human Cytomegalovirus in Monocytes: Evidence for a Putative Herpesvirus Superantigen," <u>Cell</u> , 82:753-763 (1995).
	Doherty, P.C., "Cell Mediated Immunity in Virus Infections," <u>Scand. J. Immunol.</u> , 46:528-540 (1997).
	ElGhazali, G.E.B. et al., "Number of Interleukin-4- and Interferon- γ -secreting Human T Cells Reactive with Tetanus Toxoid and the Mycobacterial Antigen PPD or Phytohemagglutinin: Distinct Response Profiles Depending on the Type of Antigen Used for Activation," <u>Eur. J. Immunol.</u> , 23:2740-2745 (1993).
	Germain, R.N., "The Biochemistry and Cell Biology of Antigen Processing and Presentation," <u>Annu. Rev. Immunol.</u> , 11:403-450 (1993).
	Jung, T. et al., "Detection of Intracellular Cytokines by Flow Cytometry," <u>J. Immun. Methods</u> , 159:197-207 (1993).
	Kabelitz, D. et al., "Activation-Induced Cell Death (apoptosis) of Mature Peripheral T Lymphocytes," <u>Immunol. Today</u> , 14:338-339 (1993).
	Komanduri, K.V. et al., "Restoration of Cytomegalovirus-specific CD4 ⁺ T-lymphocyte Responses After Ganciclovir and Highly Active Antiretroviral Therapy in Individuals Infected with HIV-1," <u>Nature Medicine</u> , 4(8):953-956 (1998).
	Lanzavecchia, A. et al., "From TCR Engagement to T Cell Activation: A Kinetic View of T Cell Behavior," <u>Cell</u> , 96:1-4 (1999).
	Lolli, F. et al., "HIV Antigen-Reactive T Cells Detected by Antigen-Induced Interferon γ Secretion," <u>AIDS Res. and Human Retroviruses</u> , 10(2):115-120 (1994).
<i>M</i>	Lolli, F. et al., "T and B Cell Responses to Cytomegalovirus Antigens in Healthy Blood Donors and Bone Marrow Transplant Recipients," <u>FEMS Immun. and Med. Microbiol.</u> , 7:55-62 (1993).
	Maino, V.C. et al., Fast Immune Assay System, Becton Dickinson Immunocytometry Systems.

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*Pittman GMB**3/26/00*

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<i>W</i>	Mellman, I. et al., "Lonely MHC Molecules Seeking Immunogenic Peptides for Meaningful Relationships," <u>Current Opinion in Cell Biology</u> , 7(4):564-572 (1995).
<i> </i>	Meyaard, L. et al., "Single-Cell Analysis of IL-4 and IFN- γ Production by T Cells from HIV-Infected Individuals," <u>J. of Immunol.</u> , 157:2712-2718 (1996).
<i> </i>	Openshaw, P. et al., "Heterogeneity of Intracellular Cytokine Synthesis at the Single-Cell Level in Polarized T Helper 1 and T Helper 2 Populations," <u>J. Exp. Med.</u> , 182:1357-1367 (1995).
<i> </i>	Pickier, L.J. et al., "Direct Demonstration of Cytokine Synthesis Heterogeneity Among Human Memory/Effector T Cells by Flow Cytometry," <u>Blood</u> , 86(4):1408-1419 (1995).
<i> </i>	Prussin, C. et al., "Detection of Intracytoplasmic Cytokine Using Flow Cytometry and Directly Conjugated Anti-cytokine Antibodies," <u>J. Immun. Methods</u> , 188:117-128 (1995).
<i> </i>	Russell, J.H., "Activation-induced Death of Mature T Cells in the Regulation of Immune Responses," <u>Current Opinion in Immunology</u> , 7:382-388 (1995).
<i> </i>	Salmon, M. et al., "Production of Lymphokine mRNA by CD45R ⁺ and CD45R ⁻ Helper T Cells from Human Peripheral Blood and by Human CD4 ⁺ T Cell Clones," <u>J. Immunol.</u> , 143(3):907-912 (1989).
<i> </i>	Sornasse, T. et al., "Differentiation and Stability of T Helper 1 and 2 Cells Derived from Naive Human Neonatal CD4 ⁺ T Cells, Analyzed at the Single-cell Level," <u>J. Exp. Med.</u> , 184:473-483 (1996).
<i> </i>	Suni, M.A. et al., "Detection of Antigen-Specific T Cell Cytokine Expression in Whole Blood by Flow Cytometry," <u>J. Immunol. Meth.</u> , 212:89-98 (1998).
<i> </i>	Surcel, H.-M. et al., "Th1/Th2 Profiles in Tuberculosis, Based on the Proliferation and Cytokine Response of Blood Lymphocytes to Mycobacterial Antigens," <u>Immunology</u> , 81:171-176 (1994).
<i> </i>	Waldrop, S.L. et al., "Determination of Antigen-specific Memory/Effector CD4 ⁺ T Cell Frequencies by Flow Cytometry," <u>J. Clin. Invest.</u> , 99(7):1739-1750 (1997).
<i>W</i>	Waldrop, S.L. et al., "Normal Human CD4 ⁺ Memory T Cells Display Broad Heterogeneity in Their Activation Threshold for Cytokine Synthesis," <u>J. Immun.</u> , 161:5284-5295 (1998).

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Philip Gambrell 3/26/00

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